

TowerFeed™ for HP color LaserJet 4650

Manual



Rutishauser

Manual

TowerFeed™ for Hewlett-Packard color LaserJet 4650 Printers

TABLE OF CONTENTS	1
PREFACE	3
BOX CONTENTS	4
UNPACKING	5
INSTALLATION	
Hardware Installation	6
Printer Panel Settings	9
Software Installation	10
OPERATING	
Loading Paper	11
Reloading Paper	12
Out of Paper	12
Paper Jam	13
APPENDIX A - Printer Specific Notes	14
APPENDIX B - PCL Paper Selection Commands Tips & Hints	15
APPENDIX C - Tips & Hints	16
APPENDIX D - Paper Quality Guidelines	18
APPENDIX E - Troubleshooting	19
APPENDIX G - Configuration Page Printer Selftest Pages	21
Configuration Page	22
Menu map Event Log Page	23
Event Log Page	24
APPENDIX H - TowerFeed Selftest	25
APPENDIX I - Cleaning and Maintenance	26
APPENDIX J - TowerFeed Specifications	27
NOTES	28

Congratulations! You selected TowerFeed, a superior sheet feeder specifically designed by Rutishauser Data AG in collaboration with Hewlett-Packard, USA, to extend paper handling capabilities of the HP color LaserJet 4650.

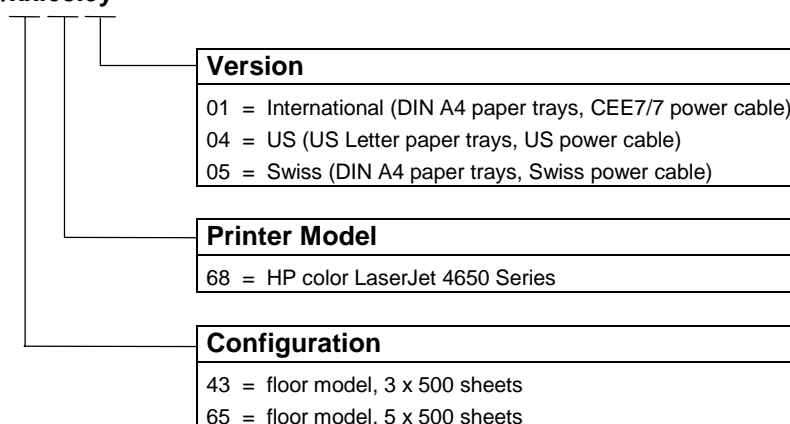
The TowerFeed Option offers new possibilities. You can

- **select from up to 7 different paper types directly from your PC.**
- **print extra copies instead of going to the copier to make copies.** You get the better copies and you Color code copies of documents on color paper help to clearly identify a copy. The color already defines the addressee and you will save the marking of the copies.
- **realize an attractive alternative to the multi-part forms printed on conventional impact printers.** You will get better copies, raise the flexibility and you can save cost for expensive preprints and chemical papers.

We encourage you to read this manual carefully to ensure correct installation and reliable operation. While installing TowerFeed, or whenever an unclear situation arises, please also consult the user's manuals of your HP color LaserJet 4650, your computer system, your application software and your network software.

The name TowerFeed is generic to the TowerFeed family of automatic sheet feeders and is used throughout this manual. TowerFeed has this model number scheme:

TowerFeed 444/xx.68.0y



For example: TF 444/65.68.01 is an international version with 5 DIN A4 paper trays, and CEE7/7 power cable.

A plate showing type, designation and serial number is located besides of the power inlet of TowerFeed. Please refer to this designation and the serial number whenever you call your service organization.

Rutishauser Data AG, Switzerland, reserves the right to make changes to its products or services without prior notice and without incurring any obligations to incorporate such changes in units or publications shipped.

Rutishauser shall in no event be liable for incidental or consequential damages arising from the use of its equipment.

TowerFeed™ is a registered trademark of Rutishauser Data AG.

Windows™ is a registered trademark of Microsoft Corp.

TowerFeed Support Software for Windows™ is a copyrighted product of Rutishauser.

Other products and brand names mentioned are trademarks or registered trademarks of their respective companies.

BOX CONTENTS

Note:

Prior to delivery, your TowerFeed was thoroughly tested and carefully packaged.
Please check your unit for transportation damage and/or missing parts immediately upon receipt.

Box Contents

- TowerFeed unit with drawers
- Accessories box



Fig. 1 Box Contents

Accessories Box Contents

- TowerFeed Start Supplementary Sheet
- TowerFeed Installations Software (CD)
- Data Cable
- Power Cable
- Rollers



Fig. 2 Accessories Box Contents

Note:

Prior to delivery your TowerFeed was thoroughly tested and care-fully packaged. Please check your unit for transportation damage and/or missing parts immediately upon receipt.

It is advisable to get a second person to help you unpack the unit.

Warning:

TowerFeed weighs up to 60 kilograms (130 pounds) depending on configuration. Enlist the help of a second person to lift and place the printer. To prevent back strain or injury, bend your knees when lifting the unit.

Unpacking the TowerFeed unit

- Cut the packing strips and remove the top of the shipping container.
- Remove the two blue shock absorbers and the accessories box from the top of the unit (Fig. 3).
- If TowerFeed is delivered with the optional stand for the 4-tray unit, remove the stand that is packed in front of TowerFeed (Fig. 4).
- Enlist the help of another person and carefully lift TowerFeed out of the container (Fig. 4).
- Remove the stretched plastic from TowerFeed. Be careful to not scratch the unit when using a cutting tool.
- Insert the 4 rollers (from the accessories box) with some force onto the roller shafts of TowerFeed. They will snap into position with a noticeable click. Insert the 2 stoppable rollers on the front side and the 2 non-stoppable ones on the back side of the unit (Fig. 6).

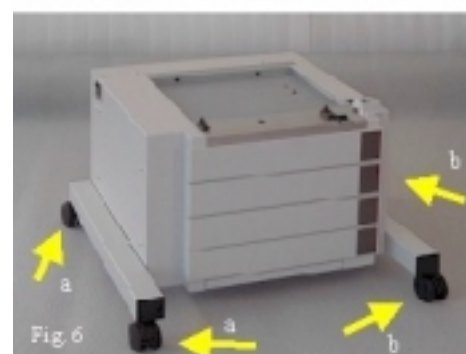
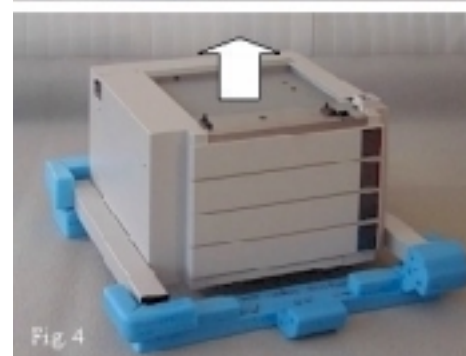
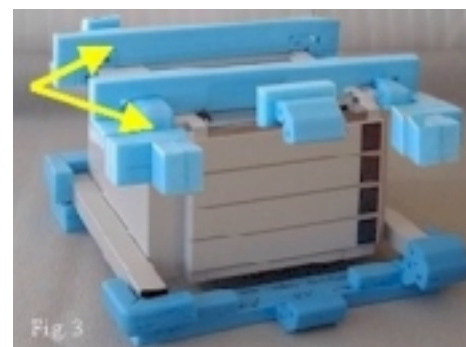
Note:

When turning TowerFeed over on a side or its back, be careful to not scratch its housing. Use a piece of cardboard or the like to prevent the unit from scratches.

- Remove the transportation inserts in the TowerFeed trays (as described in INSTALLATION)

Important:

It is recommended to keep the packaging material and inserts for proper protection of the unit and its parts in case of reshipment.



INSTALLATION

Warning:

TowerFeed may weigh up to 60 kilograms (130 pounds) depending on configuration. To prevent back strain or injury, enlist the help of someone and bend your knees when lifting the unit.

Warning:

POWER OFF your printer and TowerFeed and disconnect all power and interface cables before you proceed with the installation.

Hardware Installation

Remove Transportation Inserts

- Pull out, lift upwards and remove the trays from TowerFeed so as to remove the transportation inserts (Fig. 7). There are two at each side (keep the inserts for reshipment).
Note: The top tray is a turn round tray and does therefore not store any paper
- Re-insert and close the trays.

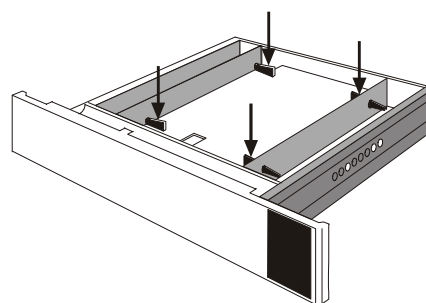


Fig. 7 Removing Transportation Inserts

Note:

Located on the right side of each tray you will find coding pins for the paper size. They are set by the factory and must not be changed.

Position and Connect Printer

Warning:

The printer may weigh up to 34 kilograms (75 pounds). Enlist the help of a second person to lift the unit. To prevent back strain or injury, bend your knees when lifting the unit.

- Place the TowerFeed unit at the location you wish.
- Carefully lift the laser printer onto TowerFeed. Place the printer's positioning holes on the positioning pegs of the TowerFeed top (Fig. 8).

Fig. 8



Locating the Pin Retainer

Make sure you know where the Pin Retainer are located. Pin Retainer and pin go together and provide the exact alignment of the TowerFeed relative to the Printer.

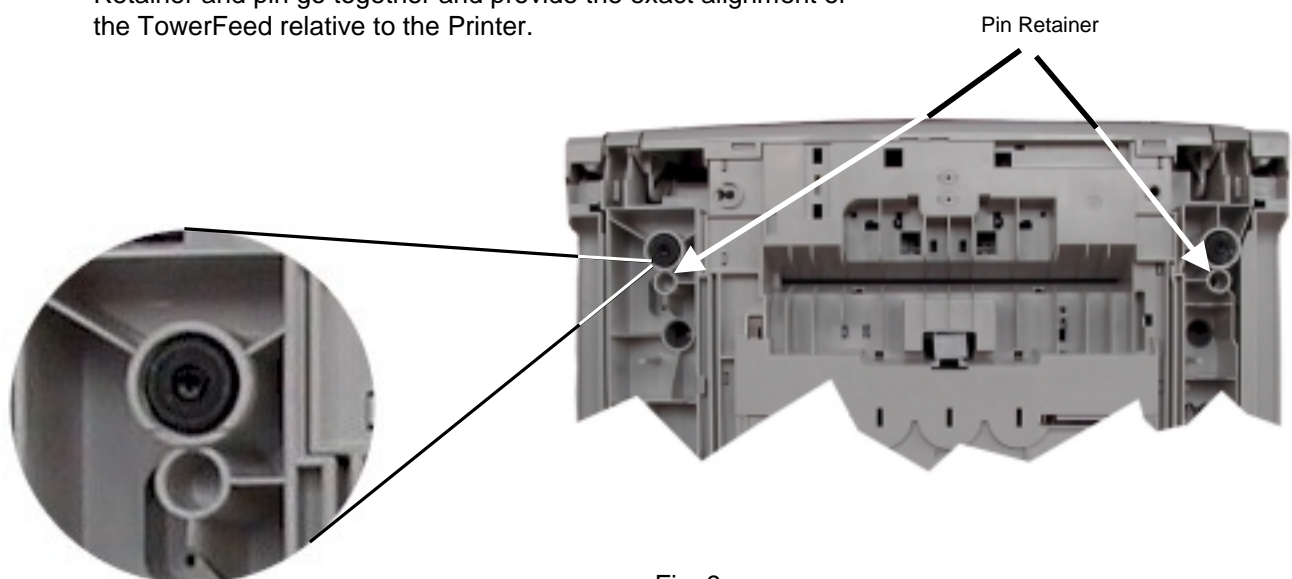


Fig. 9

Detail view of Pin Retainer

INSTALLATION

Electrical and Data Connexion

Without Stacker

- Connect printer and TowerFeed with the data cable (Fig. 10): one end with the printer and the other end with TowerFeed. Use the provided Adapter as a intermediate piece.
- Connect the power cables to printer and TowerFeed .

Note:

Power ON TowerFeed before or simultaneously with the printer.

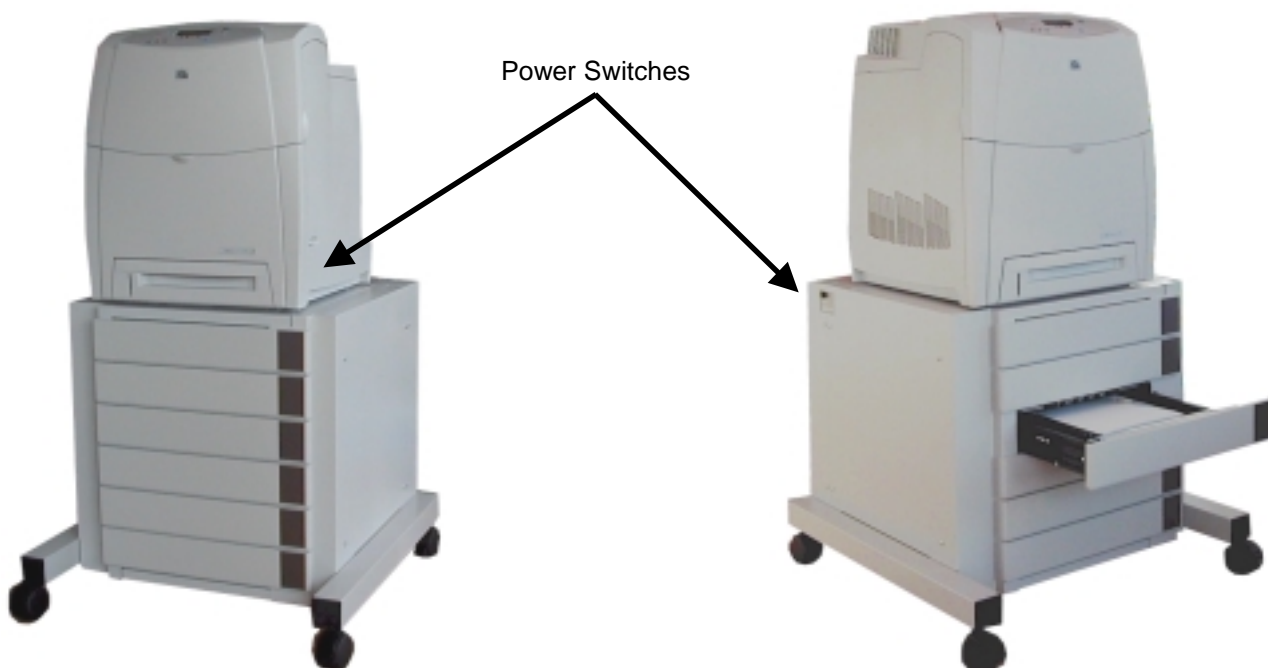
Caution:

Only move TowerFeed to another place with **drawers closed** and **without printer on top** to avoid hazard of toppling. Drawers need to be secured against unintentional opening. Be careful when crossing doorsteps or different flooring materials.



Fig. 10

Fig. 11



Printer Panel Settings

Papertype Assignments

By default, each paper tray has assigned the paper type PLAIN. In case of a paper out in a selected tray, the printer automatically will pull paper from another tray.

The assigning of a different paper type to each tray inhibits the automatic switching of the printer to another tray if the selected tray runs out of paper.

To assign a paper type to an input tray, select with the menu key the PAPER HANDLING MENU and there the specific input tray. Then assign to each tray another one of the 12 predefined paper types.

If you have several trays with the same paper, assign to each of these trays the same paper type. This will increase your input capacity for this paper type, as the printer will automatically switch to the next tray with the same paper type in case the selected tray runs out of paper.

Note:

PLAIN is the default paper type. In case a print job arrives without paper selection, the printer will pull paper from the first tray containing PLAIN paper (e.g. printer test pages).

Software Installation

Installation of Printer Driver

The CD delivered with your TowerFeed system contains the HP LaserJet 4650 PCL 5 software supporting the TowerFeed option for Windows XP and 2000.

(Postscript driver in preparation)

Note:

After installing the new printer driver, exit and restart your Windows System.

For availability of the most recent printer drivers and drivers for other operating systems, please consult our WEB page at: www.rutishauser.ch

INSTALLATION

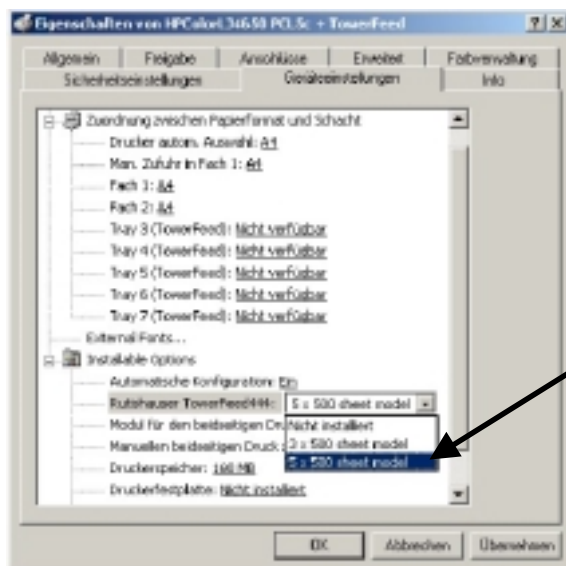
Configuring the TowerFeed Option

Go to the Control Panel and select *Printers*. There click on the respective HP LaserJet Printer.



HPColorLJ4650 PCL5c
+ TowerFeed

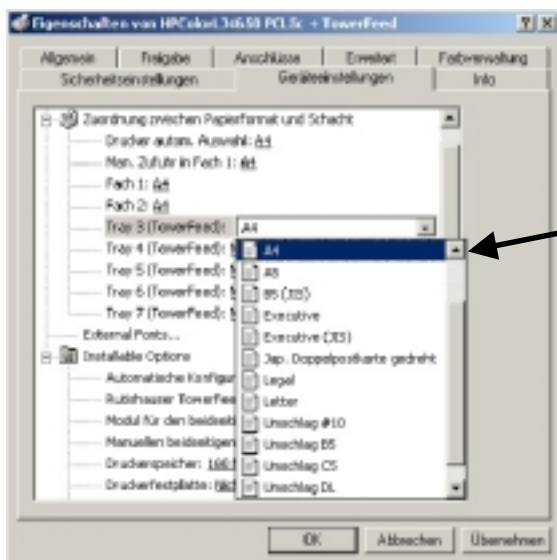
Use the right mouse button to open the *Settings*. Then click on the hardware settings icon. There choose the appropriate TowerFeed you are using in the pull-down Window, do the same as well with all the other printer equipment you are using (extension tray, duplex, etc.)



Choose the correct TowerFeed model.

Note: You must have the correct driver installed to do so.

After having done so the TowerFeed trays need to be set on the correct paper size format.



Choose the appropriate paper size format (The paper format you are going to use in your TowerFeed).

Having done so your TowerFeed is ready for operation.

Note:

For further information on Tray and MediaTyp definition please refer to Appendix B – Tips and Hints of this manual.

How to turn the system on

Note:

Power ON TowerFeed before or simultaneously with the printer.

Loading Paper

Note:

The top tray functions as a turn round device – therefore do not store anything in the top tray.
Also, please make sure to use special care when de-jaming the top tray, so not to damage it's delicate parts.

- Pull open the tray you wish to load until it reaches the stop or remove it completely for more convenient loading.
- Obtain a fresh ream of paper. Best results will be obtained using regular copier or laser printer paper (see "Paper Quality Guidelines").
Hold the ream on the long edge and bend it in and out. Repeat on the short edge. Square it off properly (Fig. 12).
- Load letterhead paper face down, with the letterhead towards the front panel.

Note:

Duplex printing requires different loading of preprinted paper (please also refer to the instructions in the printer manual).
An additional TowerFeed tray will allow to have the same (preprinted) paper in two different trays and available online for regular and duplex printing.

- Insert approx. one third of the ream in the tray and ensure that all paper is lined up with the rear stop. Repeat two more times for the rest of the ream (Fig. 13).
- Push down the stack, such that all sheets are under the separation corners (Fig. 14).
- The right paper guide can be adjusted by pushing the separation corner tab to the left to ensure proper guiding of the paper.
- Push down on the paper stack a few times. The paper must move up and down freely.

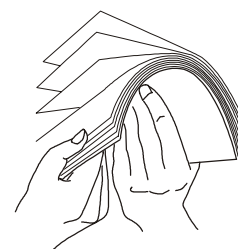


Fig. 12 Fanning the Paper

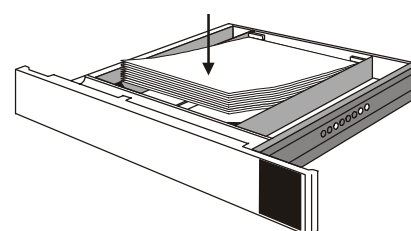


Fig. 13 Filling in Paper

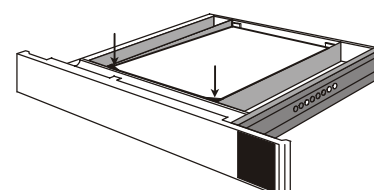


Fig. 14 Correct Paper Loading

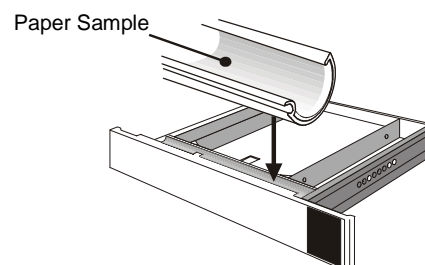


Fig. 15 Marking the Tray

OPERATING

Note:

For your convenience, you may insert a sample piece (about 1 inch/28 mm) of the loaded paper type into the extrusion as a reference when reloading the tray (Fig. 15).

- Close the tray. Repeat the procedure for all trays to be loaded.

Paper Tray empty

TRAY n EMPTY
Media Type & Size

alternating
with

READY

This message indicates an empty paper tray. Refill the depleted tray.

While feeding occurs from a higher tray, lower ones may be reloaded without interrupting feeding and printing.

Paper Tray depleted during Print Job

LOAD TRAY n
Media Type & Size

(n = tray number)

This message appears if the selected tray runs out of paper (and if there is no other tray with the same paper size and type, depending of the printer settings.)

If a tray runs out of paper, the printer will automatically switch to another tray with the same paper type and size and pull paper from there. Otherwise it displays that message, the Attention LED starts blinking, and most probably a respective error message appears at the user screen (depending on the application).

Refill the tray with the correct paper. After closing the tray, the printer will resume printing.

Requested Paper missing

LOAD TRAY 1
Media Type & Size

This message indicates that the requested paper is not available, either because the print job explicitly asks for paper from tray 1, or because it asks for paper from a tray where size and type do not correspond with the document page settings.

Load tray 1 with the requested paper or crosscheck the settings for the document (*Page Setup ...*).

Paper Jam

In case of a paper jam, the printer panel Attention LED will start blinking and the printer display will show a respective message with the following meaning:

13.03.xx PAPER JAM Paper jam in printer
13.11.xx PAPER JAM Paper jam in TowerFeed

- In case of a **printer paper jam**, you will see the following message:

13.03.00 JAM INSIDE
RIGHT DOOR

Remove the paper jam and all other pages in the paper path and close all the cover(s). Printing will continue. For more details on clearing printer paper jams please refer to your printer manual (Chapter Maintenance and Trouble Shooting, Section Paper Jams).

- In case of a **TowerFeed paper error**, the printer will display one of the following messages and TowerFeed will beep in a certain sequence, depending on the type of error:

13.11. 2 x JAM IN
INPUT ACCESSORY

Cause: TowerFeed motor blocked

TowerFeed beeping:

■ ■■■■ ■ ■■■■ ■ ■■■■ (short - long cont.)

13.11. 3 x JAM IN
INPUT ACCESSORY

Cause: Paper jam inside TowerFeed

TowerFeed beeping:

■■■■■ ■■■■■ ■■■■■ (long - long cont.)

13.11. 4 x JAM IN
INPUT ACCESSORY

Cause: TowerFeed tray opened while feeding

TowerFeed beeping:

■ ■ ■ ■ ■ ■ (6 short beeps)

13.11. 5 x JAM IN
INPUT ACCESSORY

Cause: Printer error while feeding or command not complete

TowerFeed beeping:

■■■■■ ■■■■■ ■■■■■ (long - long cont.)

* x = TF tray number (not system tray number)

Open the TowerFeed tray (the beeping stops when opening the tray that fed the last sheet), remove the jammed paper and close again all TowerFeed trays. Printing will continue automatically.

In case the printer could not automatically eject the remaining paper inside the printer, open the printer cover(s) and clear the paper path. Close the printer cover(s) to have the printer resume the print job.

APPENDIX A - Printer Specific Notes

HP LaserJet Duplexer Option

The printer's duplexing capabilities remain fully supported with the TowerFeed paper handling option installed.

POWERSAVE Function (Printer Setting)

HP colorLaserJet 4650: The POWERSAVE function is fully supported with TowerFeed installed.

APPENDIX B - PCL Paper Selection Commands

Frequently used PCL commands for Paper Selection:

Command	Function	# Refers to	LJ 4650 LJ 4650 n																																	
ESC & I # H	Selects Paper Source	0 2 3 7 4 1 8 5 6 20 21 22 23 24	print/eject page Man. Feed - Paper Man. Feed - Env. Auto Select Tray 1 Tray 2 (500-sheet Tray) NA Envelope Feeder Tray 3 TowerFeed Tray 1 Tray 4 TowerFeed Tray 2 Tray 5 TowerFeed Tray 3 Tray 6 TowerFeed Tray 4 Tray 7 TowerFeed Tray 5																																	
ESC & I # A	Sets Paper Size	2 = Letter 3 = Legal 26 = A4 101 = Customer Set for other sizes please refer to your printer manual																																		
ESC & n # Wd mediatype	Selects Media Type	<table><tr><th>#</th><th>mediatype</th><th>Panel Display**</th></tr><tr><td>6</td><td>Plain</td><td>PLAIN</td></tr><tr><td>11</td><td>Preprinted</td><td>PREPRINTED</td></tr><tr><td>11</td><td>Letterhead</td><td>LETTERHEAD</td></tr><tr><td>13</td><td>Transparency</td><td>TRNSPRNCY</td></tr><tr><td>11</td><td>Prepunched</td><td>PREPUNCHED</td></tr><tr><td>5</td><td>Bond</td><td>BOND</td></tr><tr><td>9</td><td>Recycled</td><td>RECYCLED</td></tr><tr><td>6</td><td>Color</td><td>COLOR</td></tr><tr><td>11</td><td>Card Stock</td><td>CARDSTOCK</td></tr><tr><td>6</td><td>Rough</td><td>ROUGH</td></tr></table> <p>**indication for reference purposes only</p>		#	mediatype	Panel Display**	6	Plain	PLAIN	11	Preprinted	PREPRINTED	11	Letterhead	LETTERHEAD	13	Transparency	TRNSPRNCY	11	Prepunched	PREPUNCHED	5	Bond	BOND	9	Recycled	RECYCLED	6	Color	COLOR	11	Card Stock	CARDSTOCK	6	Rough	ROUGH
#	mediatype	Panel Display**																																		
6	Plain	PLAIN																																		
11	Preprinted	PREPRINTED																																		
11	Letterhead	LETTERHEAD																																		
13	Transparency	TRNSPRNCY																																		
11	Prepunched	PREPUNCHED																																		
5	Bond	BOND																																		
9	Recycled	RECYCLED																																		
6	Color	COLOR																																		
11	Card Stock	CARDSTOCK																																		
6	Rough	ROUGH																																		

APPENDIX C - Tips & Hints

Power ON Sequence

Power On TowerFeed before or simultaneously with the printer.

When powering on the printer, it will scan its option bus for available options. In case TowerFeed is not ready at that point of time, the printer will not activate its support and not add this option to its configuration.

Printing on the wrong Paper

Why doesn't it print from the tray I selected?

If a selected Tray # ran out of paper or does not contain the paper size assigned for the print job, the printer might look for other trays containing the demanded paper size, and if this is available (and with the same Media Type as Tray #) will pull paper from there.



The 3 Rules For Correct Paper Selection

- 1. Assign a different Paper Type to every Tray # by using the printers control panel.**
You can assign the same Paper Type to two or more tray numbers only if these trays all contain the same Paper Type.
- 2. Make sure that you select the correct Paper Size for the selected Paper Type.**
The selected Paper Size in the application software must be the same as what the size of that paper in the printer actually is.
- 3. Select paper within your application by Paper Type or by Tray #.**
If a tray containing the selected Paper Type runs out, the printer will pull paper from other trays only if they have the same Paper Size and Type.

Paper Control and Selection

Selection Criteria

The HP color LaserJet 4650 offers various possibilities to select paper by offering three selection criteria:

- Paper Size
- Paper Source (Tray number)
- Paper Type (Media type)

The selection criteria differ in their priorities and can be changed using the JetAdmin utility software.

Paper Types

The Paper (Media) Type is a selection criteria which can be used to name trays and to distinguish between different paper types within a given paper size. The HP color LaserJet 4650 offers 12 predefined Media Types. The Media Types are: Plain, Preprinted, Letterhead, Transparency, Prepunched, Labels, Bond, Recycled, Color, Card Stock, and Rough.

Default Paper Type

Without a specific paper type assigned to a Tray, Plain becomes the default paper type. To assign a paper type to a Tray number using the printer control panel, please refer to Papertype Assignment on page 11 of this manual.

Where to select Paper Size and Paper Type

You select the TowerFeed option paper sources from your standard application software the same way as the regular printers paper sources.

Please also refer to Appendix B (Tips & Hints - The 3 Rules For Correct Paper Selection) for recommendations on which paper selection criteria to use.

Below you will find the information on where to set the paper selection parameters in the most common standard applications.

MS-WORD:	File - Page Setup -	Paper Size: Paper Source:
EXCEL:	File - Print - Printer - Setup -	Paper Size: Paper Source:
	File - Page Setup - Page - Options:	Paper Size: Paper Source:

APPENDIX D – Paper Quality Guidelines

General

These paper quality guidelines are general recommendations. Paper beyond these specifications may work as well, however it should be tested before use. Paper is a material that reacts intensively to adverse temperature and humidity conditions. The observance of proper conditions as defined below is therefore essential for trouble-free operation of TowerFeed. Please also refer to the corresponding guidelines in the printer manual.

Paper Quality and Surface

Bond type papers and papers with slight rag content are recommended. For papers with high rag content, as well as very light and air mail papers, feeding tests must be conducted to check for satisfactory performance before regular use. Paper with embossed or heavy printing should be tested in TowerFeed before use, as well. Papers with glossy or structured surface are not recommended. Individual sheets in a stack must not be damaged, warped more than 3 mm (0.12") at an angle of max. 20° or creased, since all these may reduce the feeding performance.

Paper Weight

The specified paperweight is 60 - 95 g / m² (16 - 24 lb.). Other paperweights must be tested before use.

Tolerance

Paper must be cut to the appropriate size dimension within a tolerance of ± 1.0 mm (± 0.04 "). The paper stack must be cut square to within a tolerance of $90^\circ \pm 0.1^\circ$.

Recommended Storage Environment

Temperature: 18°C - 24°C (64°F - 75°F)

Relative humidity: 40% - 60%






Diagnosing an Error Situation

When calling for support, please have the Printer test pages at hand (Configuration Page, Menu Map and Event Log Page as per APPENDIX G).

Pos	LED	Printer Display	TF Beeping	Description	Action / Remarks
1	ON	<div>TRAY n OPEN</div> <div>READY</div>		Tray n open	Close Tray
2	ON	<div>TRAY n EMPTY</div> <div>READY</div>		Empty Tray without pending print request	Reload Tray n
3	ON	<div>TRAY 1 LOAD Media Type & Size</div>		Requested paper not available	Load Tray 1 with the correct size See printer manual to change Media Size and Type through the printer control panel.
4	ON	<div>TRAY n LOAD Media Type & Size</div>		Paper requested from empty Tray n	Refill Tray n Switches automatically to next Tray with same Size & Type and pulls paper from there (depending on settings).
5	ON	<div>13.01 PAPER JAM IN TRAY n</div>		Paper jam in Printer	Clear paper jam and all other sheets from the paper path. Open/close printer cover(s) Also refer to section 'OPERATING - 'Paper Jam' in this manual and to your printer manual for further details.
6	ON	<div>13.20 JAM IN TOP COVER AREA</div> <div>13.11 PAPER JAM IN INPUT ACCESSORY</div>	Beep Type 2 or Beep Type 3	Paper jam in Printer and TowerFeed Paper jam in TowerFeed, and TowerFeed Motor blocked	Clear paper jam in printer and TF. Close TF Tray(s) and printer cover(s). Remove all sheets from TF and printer paper path. Close TF Tray(s) and printer cover(s). In case error stays, call Service.
7	ON	<div>13.11 PAPER JAM IN INPUT ACCESSORY</div> <div>13.11 PAPER JAM IN INPUT ACCESSORY</div>	Beep Type 2 or Beep Type 3	Paper jam in TowerFeed TowerFeed Motor blocked	Clear paper jam in TF. Close TF Tray(s). Open TF Tray(s). Remove all sheets from the TF paper path. Close TF Tray(s). In case error stays, call Service.
8		<div>INITIALIZING</div>		Printer display does not switch to READY	Turn the printer off and on again and switch off the POWERSAVE function.

APPENDIX E - Troubleshooting

TowerFeed Beep Types

Type 0 (1x short)		TowerFeed Reset Beep (e.g. after Power ON)
Type 1 (short - short)		Paper in TowerFeed paper path after a printer Reset
Type 2 (long - long)		Paper Jam in TowerFeed
Type 3 (short - long)		TowerFeed Motor blocked
Type 4 (6x short)		Opening a TowerFeed tray during a feed cycle

APPENDIX F – Printer Information Pages

The printer allows printing out information about its system configuration. These pages can be selected via the printer panel (Item: INFORMATION MENU).

Note:

The informations for the Configuration Page are recorded at power-up time. There is no update of the changes after power-up.

Configuration Page

This page will be printed via the printer panel (INFORMATION - PRINT CONFIGURATION. Of particular interest are the indications under Paper Trays and Options and Event Log:

Paper Trays and Options

- Device 1: RUTISHAUSER TOWERFEED option with configuration, Firmware Revision of Option PCB/Logic PCB, installed trays with tray capacity (80 g/m2 paper)

Event Log

shows the last three system errors, incl. TowerFeed errors.

TF Error Codes 13.11.xx	3**	4**	5**	6**	7**
TowerFeed Motor blocked	.15	.16	.17	.18	.19
TowerFeed Paper Jam	.1F	.20	.21	.22	.23
Tray opened while feeding	29	.2A	.2B	.2C	.2D
Printer error while feeding or command not complete	.33	.34	.35	.36	.37

** Number of TowerFeed paper tray (not printer tray) which fed the last sheet

Menu Map

The Menu Map page can be selected via the printer panel (INFORMATION - PRINT MENU MAP. This page is showing on page 1 (and 2), item 3 PAPER HANDLING the different paper sources and its allocated Media Types (TRAY x SIZE = ... and TRAY x TYPE = ...).

PAPER HANDLING

showing paper sources (trays) with SIZE and paper TYPE, e.g.
TRAY 4 SIZE = A4
TRAY 4 TYPE = PREPRINTED

Paper Path Test

The printer's paper path test allows to perform feeding tests from the different input trays to the output bin(s). It can be selected via the printer panel (CONFIGURE DEVICE – DIAGNOSTICS – SET PAPER PATH TEST) where you can set Source, Destination, Duplex and Copies before releasing the printing of the Test Page. The printout shows all the available input trays with their respective paper sizes and the output bins of the system.


Event Log

You can also print the Event Log (CONFIGURE DEVICE – DIAGNOSTICS – PRINT EVENT LOG). It shows the last 50 system errors (the Configuration Page only shows the last 3 errors occurred. Very helpful for diagnosing purposes! (The error codes for TowerFeed and their meaning are indicated above (see Configuration Page).

Note:

Whenever calling for service, please make sure you have these information pages at hand.

APPENDIX G - Printer Selftest Pages



hp color LaserJet 4650 printers

configuration page
1

Printer Information

Product Name: hp color LaserJet 4650
 Printer Name: hp color LaserJet 4650
 Printer Number: 29
 Printer Serial Number: XXXXXXXXXX
 Formatter Number: 5469XXXXXX
 Firmware Datecode: 26040115 07.000.0
 Service ID: 00000
 PS Wait Time-out: 300 seconds
 Page Count: 2
 Color Page Count: 2

Event Log

Number of Entries in Use: 42
 Maximum Number of Entries: 50
 Three Most Recent Entries:

Number	Page Count	Entry
42	1	13.11.43
41	1	13.11.33
40	2	13.11.22

Installed Personalities and Options


PCL (20010402)
 PCL (20010402)
 PDF (20021216)
 MIME (300)
 PS (20010402)
 DIMM Slot 1: Empty
 DIMM Slot 2: 256 MB DDR
 CARD SLOT 1: SMART ATA FLASH DISK
 CARD SLOT 2: Empty
 CARD SLOT 3: Empty
 EIO 1: Empty
 EIO 2: HP JetDirect J6057A
 EIO 3: Empty
 CARD SLOT Storage: 4096 KB Capacity
 RAM DISK Storage: 175 MB Capacity

Calibration Information

Last CPR page count: 0
 Last DMax/Dm1F page count: 0

Color Density

	C	M	Y	K
HIGHLIGHTS	0.0	0.0	0.0	0.0
MIDTONES	0.0	0.0	0.0	0.0
SHADOWS	0.0	0.0	0.0	0.0



Memory


Installed DIMM Memory: 256 MB
 On Board Memory: 32 MB
 Total Memory: 288 MB
 DWS: 70.00
 Automatic Resource Saving Enabled

Security

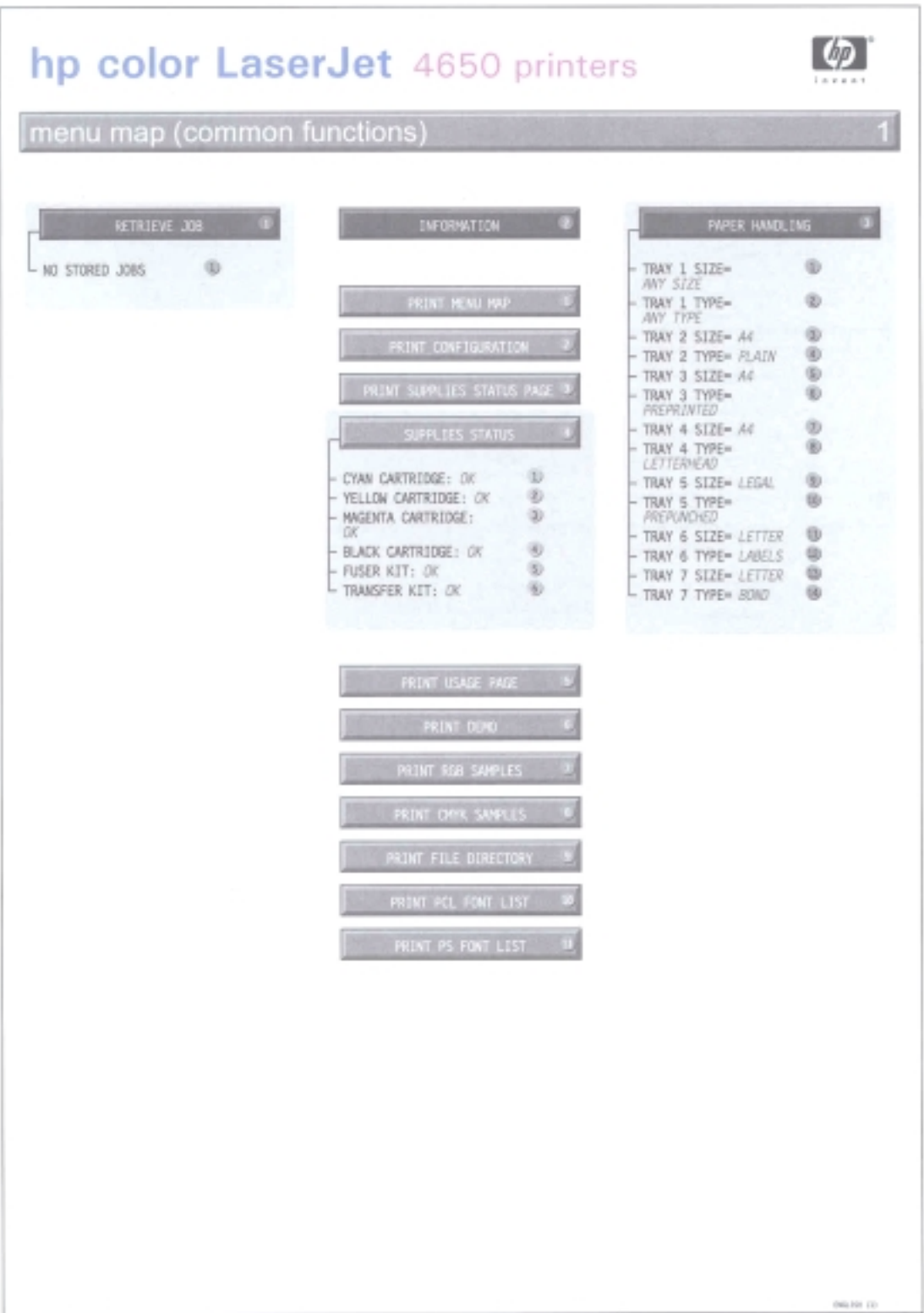
Control Panel Lock: NONE
 Control Panel Password: DISABLED
 Write Protect: DISABLED
 File System Access:
 P/L: ENABLED
 P/M: ENABLED
 NFS: ENABLED
 PostScript: ENABLED

Paper Trays and Options

Default Paper Size: A4
 Tray 1 Size: ANY SIZE
 Tray 2 Size: A4 STANDARD
 Duplex Unit:
 Device 1:
 RUTISHAUSER TOWERFEED
 444.xx-66.xx 2.10/1.20 [11322]
 Input Trays:
 1: TRAY 3, 500 Sheets
 2: TRAY 4, 500 Sheets
 3: TRAY 5, 500 Sheets
 4: TRAY 6, 500 Sheets
 5: TRAY 7, 500 Sheets



Please refer to page 21 for more information on this page.



Please refer to page 21 for more information on this page.

APPENDIX G - Printer Selftest Pages

hp color LaserJet 4650 printers



event log page

1

Current Page Count: 1

Serial Number: XXXXXXXXXX

Number	Page Count	Event	Description or Personality
4	1	13.11.43	EXTERNAL INPUT DEVICE PAPER JAM
3	1	13.11.33	EXTERNAL INPUT DEVICE PAPER JAM
2	2	13.11.22	EXTERNAL INPUT DEVICE PAPER JAM
1	1	13.11.42	EXTERNAL INPUT DEVICE PAPER JAM

Please refer to page 21 for more information on this page.

TowerFeed Selftest Feature

The TowerFeed selftest feature allows to test the TowerFeed unit independently from any printer and computer. With this test you can check for correct paper feeding (horizontal position, skew, jam behavior).

Note:

To perform a TowerFeed selftest, remove the printer's paper cassette.

Follow the following steps:

- Power-off TowerFeed.
- Open all TowerFeed Trays (approx. 5 cm is sufficient).
- Power-on TowerFeed.
- Wait until you hear a short beep followed by the clicking of the solenoid activation in every module, and finally the spinning of the motor (approx. 5 sec).
- Close the top-most TowerFeed tray. After a few seconds a sheet will be fed from this drawer. You now can mark the position of the left border of the sheet on the TowerFeed top cover (reference for horizontal paper position).
- Pull out the sheet from its waiting position. TowerFeed will automatically feed a next sheet. You now can compare the position of the left border of the next sheet. If it moves up straight in the same position, this is ok. (In case the left position would be different, or moving from left to right (or vice-versa), this might indicate a problem in either the tray, the unit (module) or the paper loading.)
- To test the next lower tray, close that tray before removing the sheet from its waiting position. Now TowerFeed will feed the sheet from that next lower tray. (TowerFeed will always feed the next sheet from its lowest closed tray.)
- To revert to normal operation, power-off and on TowerFeed again with at least on tray closed. TowerFeed will respond with a short 'Reset' beep that it is ready again.

In case error conditions are showing up which are depending on a specific TowerFeed tray, you can swap trays to find out whether a problem exists with the tray itself or whether a specific module is the cause.

APPENDIX I - Cleaning and Maintenance

TowerFeed does not require preventive maintenance. Cleaning of housing and removal of paper dust from within the TowerFeed drawers might now and then be indicated.

In case you are using a paper type which emits large amounts of paper dust, it might be indicated to clean the transport rollers and oil the bearings of the transport roller shafts occasionally. For that purpose use only the Rutishauser maintenance-kit No. 270 302.

Clean the outside of TowerFeed with a lightly water-dampened cloth. Do not use detergents to avoid damage of the surfaces.

To **clean the paper drawers** from paper dust, completely remove the drawers from TowerFeed, remove the paper and use a vacuum cleaner with a soft brush.

For further references see our WebPages: www.rutishauser.ch

Warning:

To avoid damage to the paper-out sensor arms do not reach into the openings for the paper drawers.

APPENDIX J – TowerFeed Specifications

Dimensions and Weights:	<i>Model Designation</i>	<i>Width</i>	<i>Depth</i>	<i>Height</i>	<i>Weight</i>
Floor Model with 3 trays	TF 444/43.68.	740 mm	725 mm	503 mm	45 kg
Floor Model with 5 trays	TF 444/65.68.	740 mm	725 mm	683 mm	58 kg
Paper Specifications:	60 - 95 g/m² (16 - 24 lb.)				
	Note:	Also consult the paper specifications for your printer.			
Paper Trays:	<i>Standard trays:</i>				
	Europe:	A4 Portrait (European Size)			
	USA:	US Letter Portrait (8 ¹ / ₂ " x 11")			
	<i>Optional trays:</i>				
	USA:	US Legal Portrait (8 ¹ / ₂ " x 14")			
Tray capacity:	Up to 500 sheets or a stack of 52 mm, whichever is reached first.				
Positioning accuracy:	For bond type paper typically better than				
	vertical:	+/- 2.0 mm (0.08")			
	horizontal:	+/- 2.0 mm (0.08")			
	skew:	2.5 mm (0.10")			
Temperature:	Operating:	10°C to 32°C (50°F to 90°F)			
	Storage:	-25°C to 50°C (-13°F to 122°F)			
Relative humidity (non-condensing):	Operating:	30% to 80%			
	Storage:	5% to 95%			
	Note:	Observe recommended storage conditions for paper (see 'Paper Quality Guidelines').			
Power Requirements:	Voltage	100 - 230 V~ (+/-10%)			
	Frequency	50 – 60 Hz			
	Current	1.5 A max.			
Fuse Type:	3.15A / 250V slow (5x20mm)				

Rutishauser Data AG, Switzerland, reserves the right to make changes to its products or services without prior notice and without incurring any obligations to incorporate such changes in units or publications shipped.

Rutishauser shall in no event be liable for incidental or consequential damages arising from the use of its equipment.

TowerFeed is available for the following HP LaserJet printers:



TowerFeed 444 for the
HP LaserJet 4100 Series



TowerFeed 444 for the
HP LaserJet 4200 / 4300 Series



TowerFeed 444 for the
HP color LaserJet 3700 Series



TowerFeed 444 for the
HP colorLaserJet 4750 Series



TowerFeed 444 for the
HP LaserJet 8150 Series



TowerFeed 444 for the
HP LaserJet 9000 / 9000 MFP

TowerFeed – a Swiss product - manufactured by

Rutishauser Data AG
Kronenstrasse 9
CH-8712 Staefa
Switzerland

Tel	+41 (0) 43 477 1111
Fax	+41 (0) 43 477 1122
e-mail	welcome@rutishauser.ch
Internet	www.rutishauser.ch